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Primary Care Delivery in Frontier Alaska

A Feasibility Analysis of Delivering Primary Care Through an Expanded EMS Scope of Practice

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Section 1

Background

Stimulus for Conducting Research

The incredible size of the state and disbursed population of Alaska presents a challenge for the delivery of medical care. Although specialized care may be concentrated in the population centers, primary care is typically distributed through smaller communities in order to improve access.

Primary care is delivered principally by physicians in the medium-sized and larger communities. In smaller communities, mid-level practitioners provide primary care with established referral patterns. In most native communities, primary care is provided by Community Health Aides and Community Health Practitioners.

Financial and logistical constraints limit primary to communities that can support such medical services. These underserved communities serve as the focus of this research.

Community Resources

In an attempt to deliver primary care to the residents of underserved communities, the simplest approach will be to utilize resources already present locally. These resources include financial systems, personnel, and capital equipment and property.

Funding for health care in Alaska is provided through three primary means:

- Direct payment for services from private and public sources including private insurance, Medicare, Medicaid, and fee-for-service payments.
- Regional native health corporation sources include federal funding, state funding, grants, and project revenue.
- Federal provision of health care, including the military and Veterans Administration.

A variety of allied health personnel exist in the smallest communities. Quantifying these individuals is difficult due to a number of factors. The most significant barrier to

- Emergency medical service personnel, including Emergency Medical Technicians and Emergency Trauma Technicians.
- Certified Nursing Assistants
- Inactive Community Health Aides

Capital equipment and property

- Inactive / former health clinics
- Community structures, including town halls, schools, and community centers
- Computer hardware and communication links in schools, community centers, and private homes

Regional and Statewide Resources

Alaska is currently in a state of financial flux. With declining oil revenues and increasing costs, it is expected that either a state-wide tax or withdrawing funds from the Permanent

Fund will be instituted in the near future. Until that happens, cost cutting throughout state government is expected to continue.

Budget cutting has been proposed by the state house and senate. The two groups have different priorities in their budgets, which also differ from that of the governor. One common feature, though, is reductions in the funding to agencies including the Community Health and EMS Section. If budgets are cut significantly, it is expected that the services provided will be reduced. New programs will only be developed at the expense of current programs.

There are a variety of organizations that support primary care throughout Alaska.

- Alaska Community Health and EMS Section, Department of Health and Social Services
- Denali Commission, joint federal-state organization
- Alaska Public Health Nursing, Department of Health and Social Services
- Health Sciences Information Service, University of Alaska
- Alaska Center for Rural Health, University of Alaska
- Alaska Primary Care Association

Federal Resources

Federal support of primary care clinics, providers, and systems is channeled primarily through the Bureau of Primary Health Care, a unit of HRSA, and the Department of Health and Human Services. One of their primary goals is a movement towards 100% access and no health disparities. This program works to foster partnerships between communities and their health care providers by "re-engineering and restructuring community assets already in place."

The National Centers for Health Workforce Information, another unit within HRSA, has produced a document that describes healthcare employment statistics specific to Alaska. Pertinent data from their work is included in the adjoining table as well as various other locations in this document.

Medicare provides funding for the health care of the elderly. Unfortunately, Medicare pays rural physicians and hospitals less for the same services and is a larger share of the payer mix. Ricketts (1999) reports that even when controlling for all Medicare adjustments, average rural hospital payments are 40% less than urban hospitals and 30% less for physician payments.

	Alaska	U.S.
Firearm deaths	20.7 Rank: 47/50	12.2
TB cases	12.8 Rank: 49/50	7.4
Hospital beds per 100,000 population	201.6 Rank: 47/50	310.8
Pct. of total employment in health services sector, 1998	6.1% Rank: 49/50	9.0%
Physicians per 100,000 population	154.7 Rank: 46/50	197.5
Physician Assistants per 100,000 population	34.4 Rank: 1/50	10.4
Nurse Practitioners per 100,000 population	60.6 Rank: 1/50	26.3
Health care expenditures per capita	$3,648 Rank: 3/50	$3,053

State Health Workforce Profile, Dec 2000

Elderly members of rural communities are as likely to live alone as their metropolitan counterparts. The rural elderly, though, describe their health as "poor" and have a functional problem and more frequently. Rosenthal (2000) proposes that this is related to the lower financial resources of the rural

elderly imposing a barrier to medical care. Therefore, the impact of low Medicare reimbursements is amplified in rural America.

Congress has made an effort to change this disparity. In cases where a rural hospital is the only available facility, a new designation has been established. These Critical Access Hospitals are funded at a higher rate once specific criteria have been met.

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The federal presence in healthcare in Alaska is extensive. Numerous military bases provide health care to members of the military, members of the commissioned corps (Public Health Service and NOAA), their families, retirees, and to native Alaskans.

The Public Health Service provides funding through the Indian Health Service to regional corporations. These corporations deliver medical care to all Alaska Natives and American Indians within their geographic borders. In addition, they may deliver care to non-beneficiaries if there are no other local medical providers.

Section 2 Communities

CHEMS has developed a set of criteria to designate communities based upon population, geographic, and health care resource data. These categories are used to sort communities to predict funding and training requirements as well as to clarify EMS manpower needs across the state.

Community Type	Population	EMS	General Access
Very Small Community	25-150 in immediate community	Designated area for equipment and patient care with a CHA, ETT, or EMT	Limited road, air, or marine highway access to a Level III or higher community
Level I Isolated Village	Usually 50-1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; road access exceeds 60 miles
Highway Village	Usually 50-1,000 in immediate community	Community clinic with a CHA or EMT	Limited air or marine highway access to a Level III or higher community; year-round, 60 minute or less road access
Level II Isolated Sub-Regional Center or Town	Usually 500-3,000+ in immediate community	Community clinic with PA, NP, MD, or DO; health care services provided by public or private sector	Marine highway or daily air access to closest Level III or higher community; air services to Level I communities in area
Highway Sub-Regional Center or Town	Usually 500-3,000+ in immediate community	Community clinic with PA, NP, MD, or DO; health care services provided by public or private sector	Marine highway or daily air access to closest Level III or higher community; year-round 60 minute or less road access
Level III Large Town or Regional Center	Usually 2,000-10,000+ in immediate community, providing services to a regional population	Community hospital and physicians; health care service agencies include both public and private	Daily airline service to Level II, III, IV, and V communities; road or marine highway access all year.
Level IV Small City	Usually 10,000-100,000 in immediate community, providing services to a larger regional population	Hospitals with 24 hour staffed ED and full continuum of care; multiple providers of health care and other services including both public and private programs	Daily airline service to Level II, III, IV, and V communities; road or marine highway access all year
Level V Urban Center	Usually 100,000+ in immediate community, providing services to a statewide population	Some specialized medical and rehabilitation services for low incidence problems	Daily airline service to Level II, III, IV, and V communities; road or marine highway access all year

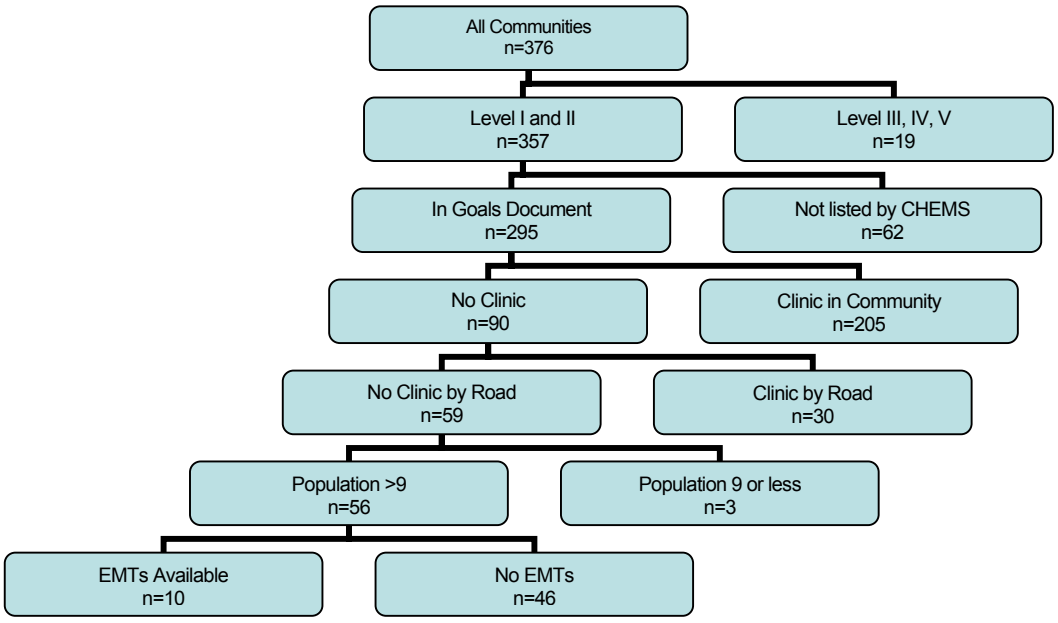
Distribution of Primary Care

The job of counting every community is a difficult task. Seasonal population changes, the mobility of logging camps, and the large number of tiny communities (under 50 people) create a fluid situation. Among those agencies responsible for identifying the communities, a principal organization is the Alaska Department of Community and Economic Development (DCED). Their efforts have established a database in which the public may access data on individual communities. This list formed the original list of all communities to be considered in this report.

This list represents all legally incorporated municipalities (except boroughs), all federally-recognized Native villages and all "Census-Designated Places" (recognized by the 2000 U.S. Census). The list also includes a number of other "communities" that do not come under these preceding classifications.

Level III, IV, and V communities include Anchorage, Barrow, Bethel, Cordova, Dillingham, Fairbanks, Homer, Juneau, Ketchikan, Kodiak, Kotzebue, Nome, Palmer, Petersburg, Seward, Sitka, Soldotna, Valdez, and Wrangell.

One of the stated goals of this project was to analyze the ability to extend primary care services to Level I and II communities. By definition, Level III, IV, and V communities have physicians and hospitals.



The Alaska Department of Commerce and Economic Development lists 357 communities after exclusion of higher level communities. These communities are listed in Appendix A.

In the process of developing the Alaska EMS Goals Document, a list of communities was generated and each one was classified according to their specific Community Type. These include both a designation of Level as well as Highway vs. Isolated for communities within the first two levels. In order to clearly address those areas that have been designated as Level I or II, the Goals Document list was matched with the DCED list and only communities that were on both lists were further considered.

Of these 357 communities, the CHEMS office has classified and listed 295 in the EMS Goals Document.

In order to determine which communities lacked primary care services, a search was conducted to determine the presence or absence of clinics in each area. This information was obtained from the Alaska EMS Directory, the FY 2003 Alaska Native Tribal Health Consortium M&I and Equipment Database, the DCED database, and from the commercially available yellow pages directories for each region.

Of the 295, there are 90 communities without primary care clinics.

An assumption is made that most people can drive, or be driven, to a primary care clinic within a 30 mile range of their community. As such, as village does not need to have a clinic as long as there is another community within a reasonable drive. Communities that are isolated without road access are not considered in this, even if a larger community is close.

Of those 90 communities, 59 communities do not have road access to primary care within 30 miles.

Both DCED and CHEMS identify communities with populations of 0 or close to 0. Those communities with no residents listed in the 2000 census were dropped from the list. Those communities with fewer than ten residents were also dropped due to the impracticality of providing primary care to such a small group.

Of those 59 communities, 56 have populations of ten or more people according to the 2000 census.

An analysis of the 56 target communities was conducted to examine the population and presence of EMTs. Since one of the functions of this report is to consider extending the scope of practice of EMTs into the delivery or primary care, a key question is to look for the presence of EMTs in these underserved communities.

	All Communities	Communities with EMTs		Communities with no EMTs
		All Levels	Advanced	
Number of Communities	n=56	N=10	n=7	n=46
Population	7365	1,397	1,276	5968
Mean Population per Community	132 (Range 10-690)	140	182	130

Distribution By Region

The State of Alaska is divided into regions by the CHEMS office so that funding and responsibility may be distributed equitably around the state. There are three major regions, Interior, Southeast, and Southern. In addition, there are addition regions referred to as Budget Request Units (BRU) that correspond to areas covered by the Maniilaq, Norton Sound, Yukon-Kuskokwim, and North Slope Native Health Corporations.

Each region has an office funded or subsidized by the State of Alaska. Each office provides EMS training, consulting, and other related services that locally enhance the delivery of EMS care.

An analysis of the fifty-six underserved communities shows that the target communities lie principally in the three major regions. The distribution is as follows:

Region	Number of Communities		Population Affected
	Total	Distressed	
Interior	15	5	1970
Southern	23	13	4332
Southeast	16	7	983
Maniilaq	1	0	32
Norton Sound	0	0	0
North Slope	0	0	0
Yukon-Kuskokwim	1	1	48

Economic Status by Community

The Denali Commission established criteria in May 2001 for assessing the economic status of communities in Alaska. The criterion is based upon market income of the

communities, income relative to the US average poverty rate, unemployment rates, and income relative to the US minimum wage. Revisions of the classification will be performed in June 2002 when new census information is released.

	All Communities	Communities with EMTs		Communities with no EMTs
		All Levels	Advanced	
Number of Communities	n=56	n=10	N=7	n=46
Distressed	79% (33 classified)	75% (8 classified)	60% (7 classified)	80% (25 not classified)

In reviewing the data above, it becomes apparent that those communities that lack EMTs also have the most economic hardship. This presents a further barrier to using EMTs in primary care – the EMTs are not in the communities where they are needed most.

Section 3 Health Providers

The provision of primary care in rural areas has received a great deal of attention. According to most authors, the greatest barrier to the delivery of care is a lack of qualified health care providers. The federal government has designated Health Professional Shortage Areas in Alaska. In the process, an assessment found that rural Alaska is short at least seventeen full-time positions. Although financial incentives have been given to critical access hospitals and loan payback funds for rural physicians, there continues to be a large number of underserved communities.

One of the solutions that have been implemented in moderate-sized communities has been the utilization of mid-level practitioners. Nurse practitioners and physician assistants can provide many of the same services as a primary care physician and have prescriptive authority approaching that of physicians.

An additional program has been developed to deliver primary care in Alaska. Community health aides work in predominantly native communities under the employ of a regional native health corporation. These health aides work in close cooperation with a physician in one of the larger hub communities.

Emergency Medical Technicians

Emergency Medical Technicians (EMTs) are certified by the State of Alaska, Community Health and EMS Section. Provisions are made for this authority in 7 AAC 26, in which the scope of an EMT's practice is described. Specifically, 7 AAC 26.040 and 26.999 limit the EMT's practice to:

- Approved airway management techniques
- Assisting with the patient's own nitroglycerine, bronchodilator inhaler, and epinephrine autoinjector
- Use an automated external defibrillator
- Skills listed in the USDOT, National Standard Curriculum for Emergency Medical Technician-Basic for Alaska EMT-I
- Modification of the USDOT, National Standard Curriculum for Emergency Medical Technician-Intermediate for Alaska EMT-II and III

Advanced skills within the scope of practice of an EMT-II include subcutaneous and intramuscular injections, initiation of intravenous lines, invasive airway control, and the administration of four medications. The EMT-III has additional medications, EKG monitoring, defibrillation, and other more invasive skills.

The State of Alaska also coordinates and authorizes the training of Emergency Trauma Technicians. These individuals must complete a course of at least 44 hours and are prepared to act as first responders at an EMS incident. They are not taught any invasive skills and are expected to use a minimum of equipment. *The State does not track the certification of ETTs*. Therefore, they will not be discussed further or included in the analyses.

In most areas, Emergency Medical Technicians practice within the framework of an organized EMS system. This typically includes a process to manage finances, maintain an inventory, and deliver an emergency response when requested. This type of system

has a standard method of delivering patients to a higher level of care, such as by ambulance, aircraft, or boat. This form of response generally delegates tasks to various members of the response.

In the most rural communities, there may be an insufficient need for an organized response system. Instead, limited supplies may be kept on hand and transportation may be provided by an outside organization. A single EMT may be the entire response organization for a small community and provide medical care in the rare instances when it is required.

Expanded Scope of Practice for Emergency Medical Technicians

There has been a continuous expansion of the scope of practice for Emergency Medical Technicians. Through the introduction of invasive devices, medications, and advanced airway skills, the ability to change the course of injury and disease has improved. With research into specific facets of emergency care, the most efficacious aspect of emergency care has been augmented while those with less support have been eliminated.

There have been two divergent efforts to expand the scope of practice of EMTs. The first is a program that was developed predominantly by the University of Maryland, self described as Critical Care EMT-P. The aim is to train paramedics to provide care to patients in inter-facility transports above the usual scope of practice. Although valuable, the topics addressed in this program do not translate to primary care skills required in frontier Alaska.

In the early 1990s, a fire department in New Mexico endeavored to provide primary care services. This was a joint project, supported by the local medical community, and delivered by Emergency Medical Technicians. Known as the Red River Project, it provided valuable services but failed to demonstrate long-term viability due, in large part, to financial pressures. It is assumed that the conditions that led to the demise of the Red River Project are not significantly different from those found in rural Alaska.

Itinerant Public Health Nursing

One of the units within the Alaska Division of Public Health provides public health nursing. Of the 100 nurses employed, approximately twenty-five are itinerant nurses who provide public health services to residents of smaller communities. Public health nurses in Alaska are prohibited from treating patients for individual health concerns. Rather, they address issues involving entire communities and groups of people with similar medical conditions.

The public health nurses provide a wide variety of health assessment, health promotion, and disease prevention services and program management that include:

- immunizations
- family planning
- pregnancy testing
- prenatal monitoring
- postpartum home visits
- other home visits
- senior clinics
- chronic disease services
- well child exams
- EPSDT outreach, screening, and referral

- clinics for special needs children
- WIC and ILP referrals
- school screenings
- audiograms
- tuberculosis screening
- STD screening, counseling, treatment, and contact follow-up
- HIV prevention counseling, testing, and contact follow-up
- epidemiological investigations
- parenting education
- health education
- community assessment
- community organizing and development activities
- participation in community partnerships in response to public health concerns

Public Health Nurses describe their services as the "public health safety net" of Alaska. Service priorities vary by health center and itinerant district based on community needs, available resources, and staff capacity. The public health nurse's work time is spent in a combination of individual, family, community, and agency activities. Client services are mostly to rural and low income and/or under insured individuals and families. More than 50% of their services are provided to children less than 5 years of age and to pregnant women and adolescents. Alaska's public health nurses frequently serves as a conduit of information between multiple state and local agencies and the public in their communities on a wide range of public health concerns.

Public health nurses are based out of the following communities:

Anchorage	Glennallen	Seward
Bethel	Haines	Sitka
Cordova	Homer	Tok
Craig	Juneau	Valdez
Delta Junction	Kenai	Wrangell
Dillingham	Ketchikan	Kotzebue
Fairbanks	Kodiak	Barrow
Fort Yukon	Wasilla	Nome
Galena	Petersburg	

Community Health Aides

Community Health Aides (CHAs) are primary care providers employed by regional native health corporations. They are trained to provide health care to members of smaller communities in conjunction with physicians in hub communities.

There are four levels of health aides, with the highest described as a Community Health Practitioner.

Alaska statutes include limited references to Community Health Aides. The only specific reference is a statute that allows for grants to programs that employed health aides since the 1980s (AS 18.28).

The Alaskan Community Health Aide Program Expansion Act of 1997 was introduced in the U.S. Senate by Senator Frank Murkowski as an amendment to the Social Security Act to provide community health aides to communities that didn't qualify through the Indian Health Service. Communities that are covered by the Indian Health Service are defined

by section 119 of the Indian Health Care Improvement Act (25 U.S.C. 1616l). This legislation was referred to the Senate Committee on Finance, was read twice, and had no further action taken.

Current regulations do not provide for Community Health Aides to operate outside of the realm of the Indian Health Service. Expansion of the purview of CHAs can change only if legislative action is taken at the state or federal level.

Certified Nursing Assistants

There is widespread distribution of certified nursing assistants (CNA). The role of a CNA is designed to deliver routine care to patients under the direction of a registered nurse. These individuals typically operate in long-term care environments or in the homes of patients with debilitating illnesses.

The limited scope of training and experience of these individuals does not lend itself to the delivery of primary care without a significant investment in additional training.

Section 4

Solutions

Potential methods for delivering primary care to the target communities:

- Incentives to increase physician presence
- Expansion of itinerant public health nursing
- Implementation of itinerant mid-level practitioners
- Geographic expansion of community health aides
- Expanded scope of practice for EMTs
- Telemedicine implementation

Incentives to Increase Physician Presence

Strengths

- Optimal level of primary care
- Current structure already in place for reimbursement
- Recruiting system well established as well as the ability to provide temporary coverage as necessary

Weaknesses

- Incentives will require additional funding and resources from the State of Alaska and/or federal government
- Insufficient number of physicians to provide primary care to currently served areas (excluding Anchorage bowl) – expansion of service areas would further deplete the pool
- Travel expenses
- Small patient pool to support providers
- Slow implementation related to recruiting time and installation of new clinics
- Licensing and credentialing is a time consuming and expensive process

Expansion of Itinerant Public Health Nursing

Strengths

- Workforce currently in place, expansion would be based upon the ability to recruit additional nurses
- Established efficacy of programs currently in place
- Implementation rapid due to infrastructure currently in place

Weaknesses

- An acute nursing shortage throughout the country will increase the cost to recruit and retain nurses
- Public health nurses have a scope of practice limited by legislative and administrative regulations
- Travel expenses

Implementation of Itinerant Mid-Level Practitioners

Strengths

- Wider scope of practice than public health nurses
- Reduced dependence upon day-to-day physician involvement

Weaknesses

- Higher costs than itinerant nurses
- Currently, no administrative or logistic structure in place – high start-up costs over the first two years
- Travel expenses

Geographic expansion of community health aides

Strengths

- Relatively low cost
- Training system in place
- Long historical basis in Alaska, well accepted role in communities
- No travel expenses if providing care in their own community

Weaknesses

- Requires legislative action to provide for practice authority
- Reluctance to accept health aides into non-native communities
- Development or expansion of medical direction system required
- Limited experience gained in the smallest communities may hamper the ability to provide quality health care

Expanded scope of practice for EMTs

Strengths

- Current legislative authority to provide limited care
- Expanded scope would require minimal legislative action
- Training could be modified from community health aide curriculum

Weaknesses

- Few target communities currently possess EMTs
- No current method to bill for services
- Poor historical evidence of sustainability and cost-effectiveness
- Small patient base will not provide sufficient experience in most communities to maintain diagnostic skills

Telemedicine implementation

Strengths

- Minimal training required to utilize equipment

- Only travel costs required are related to maintenance of equipment and training
- Can be installed quickly once funding is secured. Rate limiting step will be time required to education the users of the systems.
- Can be used by lay people

Weaknesses

- Cost of equipment is high, particularly when averaged over small population base
- Communication channels very limited in frontier communities – low bandwidth, few options
- Dependence upon base station / referral center for all patient contacts

Section 5

Summary

Conclusions

1. The number of Alaskans without road access to primary care is small. From our research, it is estimated that only 1.3% of the population has no local primary care available.
2. In those communities where primary care is not available, there are insufficient qualified Emergency Medical Technicians to fill the void.
3. Those communities with the least financial capabilities also have the fewest EMTs.
4. A single family practice physician typically requires a population of 2,000 to maintain a practice. The underserved population could support 3.5 FTE physicians but this would include coverage of 56 communities. When considering the travel time involved, 5 FTE physicians would be needed. This would increase salary costs by about 40% in addition to travel expenses.
5. There has already been one recent attempt to expand the geographic range of community health aides. There is no evidence that the conditions that led to failure of the legislation have changed. If community health aides are considered the best option, the legislative effort could be focused at the state level, rather than federal.

Recommendations

If a significant level of funding becomes available:

The expansion of current itinerant programs could provide a highly skilled set of providers in the smallest communities. The simplest method would be to increase the number of public health nurses and to deliver health care in the underserved areas. The program could also incorporate the involvement of mid-level practitioners in order to increase the range of services provided.

If a moderate level of funding becomes available:

An expansion of the community health aide program has been established as an efficacious way to deliver primary care into remote areas. By expanding the scope of health aides beyond Indian Health Service (and compacted) clinics, the practice of physician extenders could function in smaller non-native communities.

If a minimal level of funding becomes available:

A relatively inexpensive method of improving the availability of primary care is through a subsidy to current health care providers in order to expand the availability of primary care. One approach could be to fund the travel expenses of these providers while allowing them to charge for services as usual. Another approach could be to subsidize payments to medical providers when seeing patients in these frontier communities.

If no additional funding is available:

A valid option is to maintain the system as it currently exists. Although a small minority of Alaskans will have no primary care available locally, they may travel to hub communities to receive medical care. In ten of the 56 communities, there are EMTs available to provide emergency care until arriving at the regional center.

Communities also have the option of pooling the resources of community members in order to build and staff a clinic. In some cases, this has already been done with the assistance of federal, state, and private grants.

Vulnerabilities of this Research

Estimation of affected population

In communities that have primary care provided by regional native health corporations, the assumption was made that that those clinics would provide care to all members of the community, independent of their ethnicity. Although true in most cases, this assumption has not been verified on a community-by-community basis.

Data sources

Information was gathered from a variety of sources. The sources used were official documents and publicly-accessible documents. Due to the fluid nature of health care in the smallest communities, it is possible that changes in clinic staffing and availability have occurred since the publication of reference data.

Definition of primary care

This work considers primary care to be the delivery of health care with the intention of preventing and treating diseases. This care is conducted by, or in concert with, a physician or mid-level practitioner. When considering many of the clinics that are staffed exclusively by level 1 and 2 community health aides, a question arises as to whether they would qualify as providers of primary care. For the purposes of this work, these clinics do qualify because they have frequent contact with physicians and these same physicians make regularly scheduled visits.

Some would argue that health care providers traditionally referred to as providing "alternative health care" would qualify as providing primary care. Specifically, this could include practitioners of traditional medicine among the native communities, naturopaths, homeopaths, and practitioners of traditional Chinese medicine. With the exception of traditional Alaskan medicine, these other providers are not typically found in frontier communities. Practitioners of traditional native healing techniques in Alaska have not been included because there are no reliable references that document their identities of locations.

Financial barriers

Although primary care may be available in communities, there are members of each community who do not have sufficient resources to pay for care and are not eligible for insurance (public or private). These individuals are not included in this data because the goal was to specifically look at communities without any primary care.

Follow-On Research

From this work, we consider the following questions unanswered:

1. In those communities with only an IHS clinic, are non-native members provided primary care or must they leave the community?
2. In the frontier communities without clinics or EMTs, are there ETTs who might be trained to provide some form of limited primary care?
3. What legal basis does the State of Alaska have to authorize the practice of Community Health Aides in non-native settings?
4. What percentage of members of frontier Alaskan communities are uninsured and ineligible for public or private insurance?

Appendix **A**

Data

Alaska Primary Care Health Professional Shortage Area Status

HPSA Location	Designation Type	Federal Designation Code	FTE Deficiency	Priority
Aleutians East Borough	Geographic	D	0.8	5
Aleutians West Census Area	Geographic	D	1.6	5
Anchorage (North)	Low-income pop.	D	0.2	5
Bethel Census Area	Geographic	D	1.1	5
Bristol Bay Borough	Geographic	D	0.3	5
Denali Borough	Geographic	D	1	5
Dillingham Census Area	Geographic	W		3
Fairbanks NSB	Low-income pop.	D	0.3	2
Haines Borough	Geographic	W		3
Juneau Borough	Geographic	W		4
Kenai Peninsula Borough	Geographic	U		2
KPB - Sub-census	Geographic			1
Ketchikan Gateway Borough	Geographic	U		3
Kodiak Island Borough	Geographic	U		3
Lake and Peninsula Borough	Geographic	D	0.6	5
Matanuska-Susitna Borough	Geographic	W		4
Mat-Su - Talketna/Trapper Creek	Geographic	D	0.3	2
Nome Census Area	Geographic	W		3
Norton Sound	Geographic	D	1.7	5
North Slope Borough	Geographic	D	0.6	5

Northwest Arctic Borough	Geographic	D	1	2
Prince of Wales-Outer Ketchikan	Geographic	D	0.3	5
Sitka Borough	Geographic	R		4
Skagway-Hoonah-Angoon CA	Geographic	D	1.2	5
Southeast Fairbanks Census Area	Geographic	D	0	5
Valdez-Cordova Census Area	Geographic	W		4
Wade Hampton Census Area	Geographic	D	2.3	5
Wrangell-Petersburg Census Area	Geographic	W	0.6	4
Wrangell Sub-census	Geographic			1
Yakutat Borough	Geographic	D	0.2	5
Yukon-Koyukuk Census Area	Geographic	D	2.6	5

Underserved Communities

Legend at End of Table

Community	CHEMS Level	CHEMS Type	Regional Health Corp	Next closest	Pop
Alcan Border	1	Isolated	Tanana	Alcan Rescue or driving to Northway or Tok	21
Attu Station	1	Isolated	Aleutian/Pribilof		20
Bettles	1	Isolated	Tanana	Frank Tobuk Sr. Health Clinic in Evansville or flight to Fairbanks	43
Central	1	Isolated	Tanana	Central Rescue Squad or driving to Fairbanks (125 road miles)	134
Chase	1	Isolated	Southcentral	Sunshine Community Health Center in Talkeetna; Talkeetna Ambulance Service; driving to Palmer or Anchorage	41
Chicken	1	Isolated	Tanana		17
Chiniak	1	Isolated	Kodiak Area	Chiniak EMS and Kodiak Island Hospital	50
Coldfoot	1	Isolated	Tanana		13
Copperville	1	Isolated	Copper River	Copper Center EMS; Copper Center Health Clinic or driving to Glennallen	179
Covenant Life	1	Isolated		Haines Medical Clinic	102
Crown Point	1	Highway	Southcentral	Seward General Hospital or Central Peninsula Hospital in Soldotna	75
Cube Cove	1	Isolated		Logging camp EMT staff or flight to Angoon	72
Dot Lake	1	Isolated	Tanana		19
Dry Creek	1	Isolated	Tanana	Dry Creek EMT Response Team; driving to Delta Junction or Fairbanks	128
Elfin Cove	1	Isolated		Elfin Cove EMS; flight to Pelican, Hoonah or Juneau	32
Excursion Inlet	1	Isolated			10
Ferry	1	Isolated	Tanana	Tri-Valley Volunteer Fire Dept./EMS or Healy Health Clinic	29
Fox River	1	Highway	Southcentral	South Peninsula Hospital in Homer	616
Game Creek	1	Isolated		Game Creek EMS and Hoonah Clinic	35
Halibut Cove	1	Isolated	Southcentral	Kachemak Ferry or flight to Homer	35
Happy Valley	1	Highway	Southcentral	South Peninsula Hospital in Homer	489
Harding-Birch Lakes	1	Isolated	Tanana	Fairbanks Hospitals	216
Hollis	1	Isolated		Hollis Community Council Fire/EMS; Prince of Wales Island Area EMS; Craig Family Medical Clinic or Klawock Clinic; flight to Ketchikan	139
Hope	1	Highway	Southcentral	Hope/Sunrise EMS; Central Peninsula Hospital in Soldotna or various Anchorage hospitals	137

Community	CHEMS Level	CHEMS Type	Regional Health Corp	Next closest	Pop
Jakolof Bay	1	Isolated	Southcentral	Flight to Homer	40
Kachemak	1	Highway	Southcentral	South Peninsula Hospital in Homer; Homer Volunteer Fire Dept./EMS	431
Kenny Lake	1	Isolated	Copper River	Kenny Lake Ambulance/Copper River EMS and Copper Center Clinic	410
Kupreanof	1	Isolated		Skiff to Petersburg	23
Lake Minchumina	1	Isolated	Tanana	Lake Minchumina Rescue Squad; flight to Fairbanks	32
Livengood	1	Isolated	Tanana		29
Lutak	1	Highway		Haines Medical Clinic	39
McCarthy	1	Highway	Copper River	Chitina Health Clinic or Copper Center Clinic	42
McKinley Park	1	Isolated	Tanana	Denali National Park Ambulance or Healy Clinic	142
Mendeltna	1	Isolated	Copper River	Copper River EMS; Lake Louise First Responders; Cross Road Medical Center in Glennallen	63
Meyers Chuck	1	Isolated		Meyers Chuck EMS; flight to Ketchikan	21
Naukati Bay	1	Isolated		Naukati EMS; Prince of Wales Island Area EMS; flight to Craig or Coffman Cove	135
Nelchina	1	Isolated	Copper River		71
Paxson	1	Isolated	Copper River	Copper River EMS; Delta Junction Health Clinic or Gulkana Clinic	43
Pleasant Valley	1	Highway	Tanana	Fairbanks hospitals	623
Point Baker	1	Isolated		Point Baker EMS; Prince of Wales Island Area EMS or flight to Wrangell or Juneau	35
Port Alexander	1	Isolated		Port Alexander EMS or flight to Sitka	81
Port Alsworth	1	Isolated	Bristol Bay	Port Alsworth First Responders; flight to Nondalton	104
Port Protection	1	Isolated		Port Protection EMS; Prince of Wales Island Area EMS or flight to Wrangell	63
Portage Creek	1	Isolated	Bristol Bay	Flight to Dillingham	36
Red Devil	1	Isolated	YKHC	Skiff or flight to Sleetmute or Crooked Creek	48
Red Dog Mine	2	Isolated	Maniilaq		32
Skwentna	1	Isolated	Southcentral	Lake Creek / Skwentna First Responders; flight to Palmer or Anchorage	111
Tazlina	1	Isolated	Copper River	Copper Center Clinic or Cross Road Medical Center in Glennallen	149
Thom's Place	1	Isolated			22

Community	CHEMS Level	CHEMS Type	Regional Health Corp	Next closest	Pop
Tolsona	1	Isolated	Copper River		27
Tonsina	1	Isolated	Copper River	Copper Center Clinic or Chitina Clinic	92
Trapper Creek	1	Highway	Southcentral	Trapper Creek Ambulance Service and Valley Hospital in Palmer; Sunshine Community Health Center in Talkeetna	423
Two Rivers	1	Highway	Tanana	Two Rivers Rescue and Fairbanks hospitals	482
Whale Pass	1	Isolated		Whale Pass Volunteer EMS; Prince of Wales Island Area EMS, Craig Clinic or air transport to Ketchikan General Hospital	58
Whitestone Logging Camp	1	Isolated		Hoonah Clinic	116
Womens Bay	1	Highway	Kodiak Area	Kodiak hospitals	690

CHEMS Level – See table in Section 2
CHEMS Type – See table in Section 2
Next Closest – Information from DCED regarding close EMS and primary care
Pop – Population per 2000 census

Alaska DCED Community List

Legend at End of List

Adak
Afognak
Akhiok
Akiachak
Akiak
Akutan
Alakanuk
Alatna
Alcan Border
Aleknagik
Aleneva
Allakaket
Alpine
Ambler
Anaktuvuk Pass
* Anchorage
Anchor Point
Anderson
Andreafsky
Angoon
Aniak
Anvik
Arctic Village
Atka
Atmautluak
Atqasuk
Attu Station
* Barrow
Bear Creek
Beaver
Belkofski
Beluga
* Bethel
Bettles
Big Delta
Big Lake
Bill Moore's Slough
Birch Creek
Brevig Mission
Buckland
Buffalo Soapstone
Butte
Cantwell
Central
Chalkyitsik
Chase
Chefornak
Chenega Bay
Chevak
Chickaloon
Chicken
Chignik
Chignik Lagoon
Chignik Lake
Chiniak
Chisana
Chistochina
Chitina
Chuathbaluk
Chuloonawick
Circle
Clam Gulch
Clark's Point
Coffman Cove
Cohoe
Cold Bay
Coldfoot
Cooper Landing
Copper Center
Copperville
Council
* Cordova
Covenant Life
Craig
Crooked Creek
Crown Point
Cube Cove
Deering
Delta Junction
Deltana
Diamond Ridge
* DIllingham
Diomede
Dot Lake
Dot Lake Village
Douglas
Dry Creek
Eagle
Eagle Village
Edna Bay
Eek
Egegik
Eklutna
Ekuk
Ekwok
Elfin Cove
Elim
Emmonak
Ester
Evansville
Excursion Inlet
Eyak
* Fairbanks
False Pass
Farm Loop
Ferry
Fishhook
Flat
Fort Greely
Fort Yukon
Four Mile Road
Fox
Fox River
Fritz Creek
Funny River
Gakona
Galena
Gambell
Game Creek
Gateway
Georgetown
Girdwood
Glacier View
Glennallen
Golovin
Goodnews Bay
Grayling
Gulkana
Gustavus
Haines
Halibut Cove
Hamilton
Happy Valley
Harding-Birch
Lakes
Healy
Healy Lake
Hobart Bay
Hollis
Holy Cross
* Homer
Hoonah
Hooper Bay
Hope
Houston
Hughes
Huslia
Hydaburg
Hyder
Igiugig
Iliamna
Ivanof Bay
Jakolof Bay
* Juneau
Kachemak
Kaguyak
Kake
Kaktovik
Kalifornsky
Kaltag
Kanatak
Karluk
Kasaan
Kasigluk
Kasilof
Kenai
Kenny Lake
* Ketchikan
Kiana
King Cove
King Island
King Salmon
Kipnuk
Kivalina
Klawock
Klukwan
Knik River
Knik-Fairview
Kobuk
* Kodiak
Kodiak Station
Kokhanok
Koliganek
Kongiganak
Kotlik
* Kotzebue
Koyuk
Koyukuk
Kupreanof
Kwethluk
Kwigillingok
Lake Louise
Lake Minchumina
Lakes
Larsen Bay
Lazy Mountain
Levelock
Lime Village
Livengood
Lowell Point
Lower Kalskag
Lutak
Manley Hot
Springs
Manokotak
Marshall
Mary's Igloo
McCarthy

McGrath
McKinley Park
Meadow Lakes
Mekoryuk
Mendeltna
Mentasta Lake
Metlakatla
Meyers Chuck
Miller Landing
Minto
Moose Creek
Moose Pass
Mosquito Lake
Mountain Village
Mud Bay
Naknek
Nanwalek
Napaimute
Napakiak
Napaskiak
Naukati Bay
Nelchina
Nelson Lagoon
Nenana
New Allakaket
New Stuyahok
Newhalen
Newtok
Nightmute
Nikiski
Nikolaevsk
Nikolai
Nikolski
Ninilchik
Noatak
* Nome
Nondalton
Noorvik
North Pole
Northway
Northway Junction
Northway Village
Nuiqsut
Nulato
Nunam Iqua
Nunapitchuk
Ohogamiut
Old Harbor
Oscarville
Ouzinkie
Paimiut
* Palmer
Pauloff Harbor
Paxson
Pedro Bay
Pelican
Perryville
* Petersburg
Petersville
Pilot Point
Pilot Station
Pitka's Point
Platinum
Pleasant Valley
Point Baker
Point Hope
Point Lay
Point MacKenzie
Pope-Vannoy Landing
Port Alexander
Port Alsworth
Port Clarence
Port Graham
Port Heiden
Port Lions
Port Protection
Port William
Portage Creek
Primrose
Prudhoe Bay
Quinhagak
Rampart
Red Devil
Red Dog Mine
Ridgeway
Ruby
Russian Mission
Saint George
Saint Mary's
Saint Michael
Saint Paul
Salamatof
Salcha
Sand Point
Savoonga
Saxman
Scammon Bay
Selawik
Seldovia
Seldovia Village
* Seward
Shageluk
Shaktoolik
Shemya Station
Shishmaref
Shungnak
Silver Springs
* Sitka
Skwentna
Slana
Sleetmute
* Soldotna
Solomon
South Naknek
Stebbins
Sterling
Stevens Village
Stony River
Sunrise
Susitna
Sutton-Alpine
Takotna
Talkeetna
Tanacross
Tanaina
Tanana
Tatitlek
Tazlina
Telida
Teller
Tenakee Springs
Tetlin
Thom's Place
Thorne Bay
Togiak
Tok
Toksook Bay
Tolsona
Tonsina
Trapper Creek
Tuluksak
Tuntutuliak
Tununak
Twin Hills
Two Rivers
Tyonek
Uganik
Ugashik
Umkumiute
Unalakleet
Unalaska
Unga
Upper Kalskag
* Valdez
Venetie
Wainwright
Wales
Wasilla
Whale Pass
White Mountain
Whitestone Logging Camp
Whittier
Willow
Willow Creek
Wiseman
Womens Bay
Woody Island
*Wrangell
Y
Yakutat

* Indicates a Level III, IV or V community.

Bold indicates lack of primary care.

Appendix B References

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- Clinics and EMS organizations in each community

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Appendix C Legislation

Community Health Aide Program for Alaska

Title 25, Chapter 18, Social Security Act

Sec. 1616l. - Community Health Aide Program for Alaska

(a) Maintenance of Program

Under the authority of section 13 of this title, the Secretary shall maintain a Community Health Aide Program in Alaska under which the Service -

(1) provides for the training of Alaska Natives as health aides or community health practitioners;

(2) uses such aides or practitioners in the provision of health care, health promotion, and disease prevention services to Alaska Natives living in villages in rural Alaska; and

(3) provides for the establishment of teleconferencing capacity in health clinics located in or near such villages for use by community health aides or community health practitioners.

(b) Training; curriculum; Certification Board

The Secretary, acting through the Community Health Aide Program of the Service, shall -

(1) using trainers accredited by the Program, provide a high standard of training to community health aides and community health practitioners to ensure that such aides and practitioners provide quality health care, health promotion, and disease prevention services to the villages served by the Program;

(2) in order to provide such training, develop a curriculum that -

(A) combines education in the theory of health care with supervised practical experience in the provision of health care;

(B) provides instruction and practical experience in the provision of acute care, emergency care, health promotion, disease prevention, and the efficient and effective management of clinic pharmacies, supplies, equipment, and facilities; and

(C) promotes the achievement of the health status objectives specified in section 1602 (b) of this title;

(3) establish and maintain a Community Health Aide Certification Board to certify as community health aides or community health practitioners

individuals who have successfully completed the training described in paragraph (1) or can demonstrate equivalent experience;

(4) develop and maintain a system which identifies the needs of community health aides and community health practitioners for continuing education in the provision of health care, including the areas described in paragraph (2)(B), and develop programs that meet the needs for such continuing education;

(5) develop and maintain a system that provides close supervision of community health aides and community health practitioners; and

(6) develop a system under which the work of community health aides and community health practitioners is reviewed and evaluated to assure the provision of quality health care, health promotion, and disease prevention services

Alaskan Community Health Aide Program Expansion Act of 1997

Alaskan Community Health Aide Program Expansion Act of 1997 (Introduced in the Senate)

S 1402 IS

105th CONGRESS
1st Session
S. 1402

To amend the Social Security Act to establish a community health aide program for Alaskan communities that do not qualify for the Community Health Aide Program for Alaska operated through the Indian Health Service.

IN THE SENATE OF THE UNITED STATES
November 7, 1997

Mr. MURKOWSKI introduced the following bill; which was read twice and referred to the Committee on Finance

---

A BILL

To amend the Social Security Act to establish a community health aide program for Alaskan communities that do not qualify for the Community Health Aide Program for Alaska operated through the Indian Health Service.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the `Alaskan Community Health Aide Program Expansion Act of 1997'.

SEC. 2. FINDINGS.

Congress finds the following:
(1) Numerous communities in Alaska have no physicians or health care providers of any kind.
(2) While those communities are served by Alaskan public health nurses on an itinerant basis, Alaskan law prohibits those nurses from treating patients for individual health concerns.
(3) Physical and cultural isolation is so severe in those communities that private health care providers often opt not to serve those communities.
(4) Not enough Native Alaskans reside in such communities to warrant placement of a community health aide pursuant to the Community Health Aide Program for Alaska operated through the Indian Health Service.

SEC. 3. EXPANSION OF THE COMMUNITY HEALTH AIDE PROGRAM FOR ALASKA.

Part A of title XI of the Social Security Act (42 U.S.C. 1301-1320b-16), as amended by section 4321(c) of the Balanced Budget Act of 1997 (42 U.S.C. 1320b-16), is amended by adding at the end the following:

`ALASKAN COMMUNITY HEALTH AIDE PROGRAM

`SEC. 1147. Not later than October 1, 1998, the Secretary shall establish an Alaskan Community Health Aide Program (in this section referred to as the `Program') under which the Secretary shall--
`(1) provide for the training of Alaskans as community health aides or community health practitioners;
`(2) use such aides or practitioners in the provision of health care, health promotion, and disease prevention services to Alaskans living in communities that do not qualify for the Community Health Aide Program for Alaska operated through the Indian Health Service and established under section 119 of the Indian Health Care Improvement Act (25 U.S.C. 1616l);
`(3) provide for the establishment of teleconferencing capacity in health clinics located in or near such communities for use by community health aides or community health practitioners;
`(4) using trainers accredited under the Program, provide a high standard of training to community health aides and community health practitioners to ensure that such aides and practitioners provide quality health care, health promotion, and disease prevention services to the Alaskan communities served by the Program;
`(5) develop a curriculum for the training of such aides and practitioners that--
`(A) combines education in the theory of health care with supervised practical experience in the provision of health care; and
`(B) provides instruction and practical experience in the provision of acute care, emergency care, health promotion, disease prevention, and the efficient and effective management of clinic pharmacies, supplies, equipment, and facilities;
`(6) establish and maintain a Community Health Aide Certification Board to certify as community health aides or community health practitioners individuals who have successfully completed the training described in paragraphs (4) and (5), or can demonstrate equivalent experience;
`(7) develop and maintain a system which identifies the needs of community health aides and community health practitioners for continuing education in the provision of health care, including the areas described in paragraph (5)(B), and develop programs that meet the needs for such continuing education;
`(8) develop and maintain a system that provides close supervision of community health aides and community health practitioners; and
`(9) develop a system under which the work of community health aides and community health practitioners is reviewed and evaluated to ensure the provision of quality health care, health promotion, and disease prevention services in accordance with this section.'.

Appendix D Curriculum Vitae

William Kriegsman

Education

Doctor of Medicine. University of Washington School of Medicine, Seattle, WA. June 2002.

Bachelor of Science, Liberal Studies major. Regents College, Albany, NY. May 1997.

Associate of Arts, Liberal Studies. University of Alaska Southeast, Ketchikan, AK. May 1997.

Associate of Applied Science, Nursing. Regents College, Albany, NY. February 1997. Phi Theta Kappa academic honor society.

Paramedic Certificate. Skyline College, Burlingame, CA. May 1988.

Experience

Family Practice Resident, Tacoma Family Medicine. Tacoma, WA. Beginning June 2002.

Principal, SEA Consulting. Oakville, WA. April 1992 to present.

EMS Captain, City of Ketchikan Fire Department. Ketchikan, AK. February 1992 to August 1998.

Perioperative Nurse, Ketchikan General Hospital. Ketchikan, AK. May 1997 to August 1998.

Adjunct Faculty, University of Alaska Southeast. Ketchikan, AK. December 1994 to December 1996.

Deputy Chief Paramedic, Monroe EMS. Rochester, NY. January 1990 to May 1992.

Publications and Presentations

Kriegsman W. Presentation: Cold Weather Decontamination. Southeast Region EMS Symposium. Sitka AK, April 2002.

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